

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A pallet dispenser for stripping a lowermost pallet from a vertical stack of at least two pallets, comprising:

a pallet magazine for storing a vertical stack of pallets;

a platform disposed below the pallet magazine, the platform being configured to support the vertical stack of pallets, wherein the lowermost pallet at least partially rests on the platform; and

a cantilevered pusher bar configured to push the lowermost pallet from under the vertical stack of pallets and out of the pallet magazine, the pusher bar having a pallet contacting portion that is vertically spaced away from the platform when the pusher bar is in a dispensing position, such that there is a gap between the pallet contacting portion and the platform.

2. (Original) The pallet dispenser of claim 1, wherein the pallet magazine includes a front gap sized to allow passage of the lowermost pallet.

3. (Original) The pallet dispenser of claim 2, wherein the pallet magazine includes a rear gap sized to allow passage of the pusher bar.

4. (Original) The pallet dispenser of claim 3, wherein the pusher bar is movable between a substantially vertical position and a substantially horizontal position.

5. (Original) The pallet dispenser of claim 4, wherein when in the substantially horizontal position, the cantilevered pusher bar is movable through the rear gap of the magazine to the front gap.

6. (Original) The pallet dispenser of claim 1, wherein the cantilevered pusher bar is configured to move, while in a resetting position, from a position adjacent a front of the magazine to a position adjacent a rear of the magazine.

7. (Original) The pallet dispenser of claim 6, wherein when in the resetting position, the pusher arm is in a substantially vertical position.

8. (Currently Amended) The pallet dispenser of claim 1, further including rotating means for rotating the pusher bar about an axis to move the pusher bar between a the dispensing position and a resetting position.

9. (Original) The pallet dispenser of claim 8, wherein the dispensing position is a substantially horizontal position, and the resetting position is a substantially vertical position.

10. (Original) The pallet dispenser of claim 8, wherein the rotating means is a motor operably associated with the pusher bar, for rotating the pusher bar.

11. (Original) The pallet dispenser of claim 1, wherein the platform includes a smooth metal plate.

12. (Original) The pallet dispenser of claim 1, wherein the platform includes non-driven rollers.

13. (Original) The pallet dispenser of claim 1, further including means for adjusting the size of an interior of the pallet magazine.

14. (Original) The pallet dispenser of claim 1, further including:
a pusher carrier rotatably attached to the pusher bar; and
a pusher guide configured to guide movement of the pusher carrier.

15. (Original) The pallet dispenser of claim 1, further including a palletizer disposed adjacent the pallet dispenser, the pusher bar being configured to push the pallet from the pallet magazine to the palletizer.

16. (Original) The pallet dispenser of claim 1, further including motion means for providing motion to the vertical stack of pallets in the magazine.

17. (Original) The pallet dispenser of claim 16, wherein the motion means includes at least a portion of the platform.

18. (Original) The pallet dispenser of claim 16, further including:
a sensor associated with the pusher bar, the sensor being adapted to determine a jam condition of the lowermost pallet; and
a controller for activating the motion means when the sensor determines the jam condition.

19. (Original) The pallet dispenser of claim 16, wherein the motion means includes a motion bar extending through at least a portion of the platform, and a motor for moving the motion bar.

20. (Original) The pallet dispenser of claim 19, wherein the motion means further includes a motion shaft eccentrically attached to an output shaft of the motor, the motion shaft also being attached to the motion bar, such that the motion shaft drives the motion bar to provide motion to the stack of pallets.

21. (Original) The pallet dispenser of claim 19, wherein the motion bar includes rollers mounted thereon.

22. (Original) The pallet dispenser of claim 1, wherein the pallet magazine is cantilevered.

23. (Currently Amended) A method of dispensing a lowermost pallet from a vertical stack of pallets, comprising:

placing a stack of pallets in a pallet magazine;
supporting the stack of pallets with a platform of the magazine; and
pushing a lowermost pallet of the stack of pallets with a cantilevered pusher bar to strip the lowermost pallet from the stack, the pusher bar having a pallet contacting portion that is vertically spaced away from the platform when the pusher bar is in a dispensing position, such that there is a gap between the pallet contacting portion and the platform.

24. (Previously Presented) The method of claim 23, wherein pushing the lowermost pallet includes pushing the lowermost pallet through a gap in the magazine.

25. (Original) The method of claim 24, wherein pushing the lowermost pallet includes pushing the pallet through a front gap in the magazine.

26. (Original) The method of claim 25, wherein pushing the lowermost pallet further includes moving the pusher arm through a rear gap in the magazine.

27. (Original) The method of claim 23, further including the step of restraining at least a portion of the stack of pallets in the magazine with a wall of the magazine.

28. (Original) The method of claim 23, further including loosening the lowermost pallet from the stack of pallets.

29. (Original) The method of claim 28, wherein loosening the lowermost pallet includes activating a motion assembly to provide motion to the stack of pallets.

30. (Original) The method of claim 23, further including providing motion to the stack of pallets while pushing the lowermost pallet with the cantilevered pusher arm.

31. (Original) The method of claim 30, further including sensing when the lowermost pallet catches on a portion of at least one of another pallet and the magazine.

32. (Original) The method of claim 31, further including providing motion to the stack of pallets to loosen the lowermost pallet from the stack.

33. (Original) The method of claim 29, wherein providing motion to the stack of pallets includes moving at least a portion of the platform.

34. (Original) The method of claim 28, wherein providing motion to the stack of pallets further includes moving to a motion bar, the motion bar forming at least a portion of the platform.

35. (Original) The method of claim 34, wherein providing motion to the stack of pallets further includes rotating a motion shaft associated with the motion bar, to raise and lower the motion bar.

36. (Original) The method of claim 34, wherein providing motion to the stack of pallets includes moving the motion bar in a circular motion to provide the motion, the motion causing the lowermost pallet to move in a substantially vertical direction.

37. (Original) The method of claim 23, further including:
rotating the pusher bar from a substantially horizontal dispensing position to a resetting position; and
moving the pusher bar from the front of the pallet magazine to a home position at the rear of the pallet magazine.

38. (Original) The method of claim 23, further including pushing the lowermost pallet onto a palletizer.

39. (Canceled).

40. (Previously Presented) The pallet dispenser of claim 53, wherein the motion means is operably associated with at least a portion of the platform.

41. (Previously Presented) The pallet dispenser of claim 53, wherein the platform includes at least one smooth metal plate.

42. (Previously Presented) The pallet dispenser of claim 53, wherein the platform includes non-driven rollers.

43. (Previously Presented) The pallet dispenser of claim 53, wherein the motion means includes a motion bar extending through at least a portion of the platform.

44. (Original) The pallet dispenser of claim 43, wherein the motion means further includes a motor for driving the motion bar.

45. (Original) The pallet dispenser of claim 44, wherein the motion means further includes a motion shaft eccentrically attached to an output shaft of the motor, the motion shaft also being attached to the motion bar, such that the motion shaft drives the motion bar to provide motion to the stack of pallets.

46. (Original) The pallet dispenser of claim 43, wherein the motion bar includes rollers mounted thereon.

47. (Previously Presented) The pallet dispenser of claim 53, further comprising:
a sensor associated with the pusher bar, the sensor being adapted to determine a jam condition of the lowermost pallet; and

a controller for activating the motion means when the sensor determines the jam condition.

48. (Canceled).

49. (Previously Presented) The pallet dispenser of claim 53, further including a palletizer disposed adjacent the pallet dispenser, the pusher bar being configured to push the lowermost pallet from the pallet magazine to the palletizer.

50. (Previously Presented) The pallet dispenser of claim 53, wherein the pusher bar is a cantilevered bar positioned adjacent to the pallet magazine.

51. (Currently Amended) The pallet dispenser of claim 50, further including rotating means for rotating the pusher bar between a the dispensing position and a resetting position.

52. (Original) The pallet dispenser of claim 51, wherein the pusher arm, when in the dispensing position, is in a substantially horizontal position and the pusher arm, when in the resetting position, is in a substantially vertical position.

53. (Currently Amended) A pallet dispenser for stripping a lowermost pallet from a vertical stack of at least two pallets, comprising:

a pallet magazine for storing the vertical stack of pallets;

a platform disposed below the pallet magazine to support the stack of pallets;
a pallet dispensing means for moving the lowermost pallet from a bottom of the vertical stack and out of the pallet magazine;
a motion means for providing motion to the stack of pallets;
wherein the pallet dispensing means includes a pusher bar having a pallet contacting portion that is vertically spaced away from the platform when the pusher bar is in a dispensing position, such that there is a gap between the pallet contacting portion and the platform; and
wherein the pallet magazine and the pusher bar are both cantilevered.

54. (Previously Presented) The pallet dispenser of claim 53, wherein the pallet magazine includes a front gap sized to allow passage of the lowermost pallet.

55. (Original) The pallet dispenser of claim 54, wherein the pallet magazine includes a rear gap sized to allow passage of at least a portion of the pallet dispensing means.

56. (Original) The pallet dispenser of claim 55, wherein the pallet dispensing means is configured to move substantially horizontally through the pallet magazine from the rear gap to the front gap.

57. (Previously Presented) The pallet dispenser of claim 53, wherein the pallet dispensing means is cantilevered pusher bar and is configured to move while in a resetting position from a front of the magazine to a rear of the magazine.

58. (Original) The pallet dispenser of claim 57, wherein the resetting position is substantially a vertical position.

59.-75. (Canceled).

76. (Currently Amended) A palletizing system, comprising:

- a pallet dispenser including:
 - a pallet magazine for storing a vertical stack of pallets;
 - a platform disposed below the pallet magazine, the platform being configured to support the stack of pallets, wherein the lowermost pallet essentially rests on the platform;
 - a cantilevered pusher bar configured to push the lowermost pallet from under the vertical stack of pallets and out of the pallet magazine, the pusher bar having a pallet contacting portion that is vertically spaced away from the platform when the pusher bar is in a dispensing position, such that there is a gap between the pallet contacting portion and the platform; and
 - a palletizer disposed adjacent the pallet dispenser, the pusher bar being configured to push a pallet of the stack of pallets from the pallet magazine to a palletizer.

77. (Original) The palletizing system of claim 76, wherein the pallet magazine is cantilevered.

78. (Original) The palletizing system of claim 76, wherein the platform includes means for loosening the stack of vertical pallets.

79. (Original) The palletizing system of claim 78, wherein the means for loosening is motion assembly configured to provide vibratory motion.

80. (Original) A method for building and wrapping a load, comprising:
placing a stack of pallets in a pallet magazine;
supporting the stack of pallets on a platform;
pushing a lowermost pallet of the stacked pallets with a cantilevered pusher bar to strip the lowermost pallet from the stack of pallets;
building a load on the dispensed pallet;
providing relative rotation between a packaging material dispenser and the load to wrap packaging material around the load.

81. (Original) The method of claim 80, further including loosening the stack of pallets while pushing the lowermost pallet with the cantilevered pusher arm.

82. (Original) The method of claim 80, further including pushing the wrapped load from a wrapping means with a second cantilevered pusher arm.

83. (Canceled).

84. (Previously Presented) The apparatus of claim 86, wherein the motion assembly means includes a motion bar as a portion of the platform.

85. (Canceled).

86. (Currently Amended) An apparatus for dispensing a lowermost pallet from a vertical stack of pallets, comprising:

a pallet dispenser including a pallet magazine for holding the stack of pallets, and a platform below the pallet magazine for supporting the stack of pallets;

a motion assembly means associated with the platform of the pallet dispenser for reducing friction between a lowermost pallet and the stack of pallets; and

a means for pushing the lowermost pallet from beneath the stack of pallets and out of the dispenser, wherein the means for pushing includes a cantilevered pusher arm having a pallet contacting portion that is vertically spaced away from the platform when the pusher arm is in a dispensing position, such that there is a gap between the pallet contacting portion and the platform.

87. (Original) The apparatus of claim 86, wherein the pusher arm is moveable between a substantially vertical resetting position and a substantially horizontal dispensing position.

88. (Original) The apparatus of claim 86, wherein the pusher arm includes a pushing surface and a pallet stack supporting surface.

89. (Original) The apparatus of claim 88, wherein the pusher arm further includes a rolling portion for supporting the stack of pallets.

90.-132. (Canceled).

133. (Original) A method for building and wrapping a load, comprising:
placing a stack of pallets in a pallet magazine;
supporting the stack of pallets on a platform;
pushing a lowermost pallet of the stack of pallets with a cantilevered pusher bar
to strip the lowermost pallet from the stack of pallets;
building a load on the dispensed pallet;
providing relative rotation between a packaging material dispenser and the load
to wrap packaging material around the load.

134. (Original) The method of claim 133, further including the step of restraining the pallets of the stack of pallets that are above the lowermost pallet from being dispensed from the magazine.

135. (Original) The method of claim 133, further including providing motion to the stack of pallets while pushing the lowermost pallet with the cantilevered pusher arm.

136. (Original) The method of claim 135, wherein the motion is vibratory motion.